

Appl. No. : 09/847,598
Filed : May 2, 2001

REMARKS

By this paper, Claims 6, 17, 28, 39, 48 and 49 are amended, and Claims 32, 40, 43, 52 and 53 are canceled. Claims 1-4, 7-8, 10-11, 13-16, 19-22, 25-27 were previously canceled. Claims 5, 9, 12, 18, 23-24, 29-31, 33-38, 41-42, 44-47, 50-51, and 54-56 are unchanged. New Claims 57-61 are added. New Claims 57, 58, and 59 are dependent Claims 40, 52 and 53 re-presented in independent form.

After entry of the foregoing amendments, Claims 5-6, 9, 12, 17-18, 23-24, 28-31, 33-39, 41-42, 44-51, and 54-61 are pending in the application. Reconsideration and allowance of the claims in light of the present remarks is respectfully requested.

Discussion of the Claim Objections

Claims 48 and 49 were objected to because of informalities. Applicant has amended the claims as suggested by the Examiner.

Discussion of the Rejection under 35 U.S.C. § 102(b)

The Examiner rejected Claim 6 under 35 U.S.C. § 102(b) as being anticipated by Bierma (WO 91/11134).

Applicant respectfully disagrees with the combining of the porous or absorbent pad and another item in Bierma, the bottom plate comprising metal or plastic, to disclose a non-absorbent pad claimed by Applicant. However, to expedite allowance of the claim, Applicant submits that the Bierma reference does not show a floor mopping assembly that automatically loads or offloads a length of the web. Applicant has amended Claim 6 to include that the floor mopping assembly automatically loads or offloads a length of the web. Support for this is found at pages 8 and 10 of the specification. Applicant respectfully submits that the Bierma reference has been overcome.

Discussion of the Rejections under 35 U.S.C. § 103(a)

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bierma in view of Kinto (U.S. Patent No. 6,142,252). Note that the Bartsch et al. patent, U.S. Patent No. 6,459,955, was not included in the rejection summary. The Office Action stated the entire apparatus of Bartsch is watertight, and therefore, the waterproof cover would encase the roll of web.

Appl. No. : 09/847,598
Filed : May 2, 2001

However, if the entire cover encloses wet or moist webbing, the internal components would get wet from the webbing. The Bartsch waterproof cover only protects from external liquids/moisture. Claim 17 is amended to recite that the webbing is moistened which would cause moisture problems in the Bartsch apparatus.

Claims 28-31, 33, 35, 36, 38, 39, 41, 42, 44, 46-51, 54 and 55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bierma in view of Nakanishi et al. (U.S. Patent No. 5,959,423). The Nakanishi patent shows a mobile work robot and a separate control section or station. The control section working from a program should not be understood as being autonomous (as mentioned on page 6 of the Office Action). For instance, Nakanishi shows operator input is necessary via the keyboard and display, and no mobility without human intervention is shown.

Regarding Claim 48, the system has been amended to recite wherein the control means is configured to autonomously navigate through an environment. The control section of the Nakanishi reference cannot autonomously move itself, but rather needs to be moved by a human. Furthermore, the Nakanishi control section does not have navigation sensors so as to know where to move.

Regarding Claim 49, the method has been amended to comprise sensing the movement of the floor mopping device thereby tracking the location of the floor mopping device. The Nakanishi reference does not show sensing the movement of the floor mopping device thereby tracking the location of the floor mopping device. The Nakanishi patent describes needing data input from the work robot as to the location of the work robot.

Note that Applicant does not consider the infrared light emitting and receiving units used for communication, described in Nakanishi at column 5, as sensors (as mentioned on page 7 of the Office Action). The infrared light emitting and receiving units are communication transmitters and receivers.

Applicant has combined allowable dependent Claim 32 into independent Claim 28, and allowable dependent Claim 43 into independent Claim 39. Therefore, in view of the above, independent Claims 28, 39, 48, and 49 are deemed patentable. Pursuant to 35 U.S.C. § 112, ¶4, the respective dependent claims incorporate by reference all the limitations of the claim to which they

Appl. No. : 09/847,598
Filed : May 2, 2001

refer. Therefore, the rejection of the dependent Claims 29-31, 33, 35, 36, 38, 41, 42, 44, 46-47, 50-51, 54 and 55 has also been overcome.

Claims 34 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bierma and Nakanishi et al. as applied to Claims 28 and 39 above, and further in view of Nishikawa et al. (U.S. Patent No. 5,568,030). The Nishikawa system appears to use predetermined travel routes for each mobile robot to prevent collisions. Claims 34 and 45 are deemed patentable because their respective independent Claims 28 and 39 are now patentable.

Claim 37 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bierma and Nakanishi et al. as applied to Claim 28 above, and further in view of Ueno (JP 11-178765). It appears that the novelty of the Ueno mop is the shaft (41), spring (43) and plate assembly (44) for the paper mopping sheet (45). Claim 37 is deemed patentable because it is dependent upon independent Claim 28 which is now patentable. Furthermore, there is no motivation shown in Bierma to use paper webbing, or in Ueno to have rollers of cloth webbing.

Claim 56 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bierma and Nakanishi et al. as applied to Claim 49 above, and further in view of Silvenis (U.S. Patent No. 5,092,699). Claim 56 is deemed patentable because it is dependent upon independent Claim 49 which is now patentable. Furthermore, the Silvenis patent does not show or describe how applying wax directly to the fabric would be done using the apparatus shown in the patent. The shown configuration would seem to waste some of the webbing in advancing the waxed webbing to the floor from the top of the housing (12).

Allowable Claims

Claims 5, 9, 12, 18, 23 and 24 were allowed in the Office Action dated April 3, 2003. Claims 32, 40, 43, 52 and 53 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicant has rewritten Claim 28 with the

Appl. No. : 09/847,598
Filed : May 2, 2001

limitations of Claim 32, Claim 40 as new Claim 57, Claim 39 with the limitations of Claim 43, Claim 52 as new Claim 58, and Claim 53 as new Claim 59.

CONCLUSION

Applicant has endeavored to address all of the Examiner's concerns as expressed in the Office Action dated April 3, 2003. In light of the above, reconsideration and withdrawal of the outstanding rejections are specifically requested.

In view of the foregoing remarks, Applicant respectfully submits that the pending claims of the above-identified application are in condition for allowance. However, if the Examiner finds any impediment to allowing all claims that can be resolved by telephone, the Examiner is respectfully requested to call the undersigned.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: June 27, 2003

By: Raimond J. Salenieks

Raimond J. Salenieks
Registration No. 37,924
Agent of Record
Customer No. 20,995
(619) 235-8550